

Each of the independent claims recites that multiple exciters are mounted to a loudspeaker panel that is “capable of supporting bending waves.” A structure that is “capable of supporting” bending waves is one with physical characteristics that enable it to operate in that fashion. Accordingly, this structural limitation cannot be ignored. Mochida makes no mention of bending waves. Nor does Paddock, whose well-known coaxial speaker design has two diaphragms that operate in pistonic fashion to generate sound.

Each of the independent claims also recites that each of the panel-mounted exciters is *separately* driven (or is adapted to be separately driven) by *independent* sources of drive signals. Acknowledging that such is not the case in Mochida, the Examiner turns to Paddock at col. 8, lines 35-37, for a teaching of “separate audio signal sources.” However, when read in context with the lines that immediately follow the referenced passage, it is clear that the audio sources referred to are in fact the upper and lower frequency ranges of “a single full-frequency-range signal [, a] crossover network [being] used to split the signal into high and low frequencies.” Paddock, col. 8, lines 37-40 (emphasis added). It follows that the “separate audio sources” are not “*independent*” as specified in the independent claims. Accordingly, the combination of Paddock and Mochida would not result in the claimed invention.

WATTERS

Claims 1-3, 6, 9-12, 15, and 18 are also rejected under 35 U.S.C. §103(a) as unpatentable over Watters (US 3,347,335). The rejection is respectfully traversed for at least the following reasons.

The Examiner refers to Fig. 8 and col. 4, lines 68-69 of Watters as support for the proposition that it would have been obvious for one of ordinary skill in the art to connect the two exciters 3 to respective independent sources of drive signals. However, the only concrete example given by Watters is to use the two components of a stereophonic sound recording to separately drive the exciters. The Examiner concedes that by this disclosure Watters “does not clearly state that the different signals originate from independent drive sources.” Office Action, p. 5. Observing that Watters “does not restrict” the signal source to a stereophonic one, the Examiner concludes that it would have been obvious to apply drive signals from independent sources. Applicant respectfully disagrees.

A reference's mere silence as to possible uses of a disclosed apparatus does not, in and of itself, suggest any or all possible uses or adaptations of the apparatus. The suggestion for a specific use must come instead from other prior art teachings – not, as here, from a hindsight application of the teachings of Applicants' own invention.

The claimed invention is made possible by the bending mode operation of the loudspeaker panel, which allows faithful reproduction of multiple excitation signals when applied simultaneously to the panel. This will not occur in the device of Watters which, in addition to being a traveling-wave (rather than a bending-wave) loudspeaker, has high damping in the middle of the panel of Fig. 8 (see col. 4, line 64), which would prevent vibration from multiple excitation signals from mixing. These characteristics of Watters would therefore discourage one of ordinary skill in the art from applying drive signals from independent sources to Watters's separate exciters.

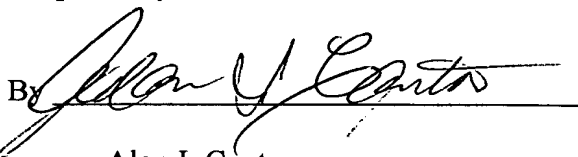
CONCLUSION

Applicant respectfully submits that the present application is in condition for allowance. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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By 

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